

**WATER OPERATIONS DIVISION** 

BID TO GOAL

**FY2008 ANNUAL REPORT** 

This is the Bid to Goal (BTG) Annual Report for FY2008, year four of Water Operations' five-year contract.

#### FINANCIAL RESULTS

Overall, the FY2008 financial results, summarized by expenditure category below and by Program in Attachment 1, were similar to the results of the previous three years. Savings from the Bid were \$9,755,317 (subject to audit). When, once again, Contingency funds savings are disallowed by the auditors, total savings for FY2008 will be \$8.6M, compared to \$10.3M in FY2007; \$9.8M in FY2006 and \$9.1M in FY2005.

After total savings are verified through the audit, half of the savings goes to the Division's Assurance Fund and half goes back to the Department to benefit ratepayers. By consistently delivering costs below the Bid, over the first three years of the BTG Program, \$14.6M of savings has been delivered to the Department. It is anticipated that an additional amount of \$4.3M will be delivered to the Department upon the final audit of FY2008.

## FY2008 Financial Results – Summary by Expenditure Category

	Audited						
		BID		Expense	Variance		
Personnel Expense	\$	33,740,571	\$	31,230,840	\$	2,509,731	
Supplies	\$	4,861,702	\$	4,816,011	\$	45,691	
Chemicals	\$	3,581,724	\$	3,186,996	\$	394,728	
Treated Water	\$	4,799,606	\$	3,023,495	\$	1,776,111	
Contractual Services	\$	5,585,939	\$	5,856,285	\$	(270,346)	
Office Equip; Training;	\$	490,942	\$	328,211	\$	162,731	
Uniforms; Etc.							
Fleet Costs	\$	4,842,006	\$	4,995,601	\$	(153,595)	
Computer Services	\$	729,360	\$	1,630,308	\$	(900,948)	
Streets / ESD	\$	2,171,343	\$	194,993	\$	1,976,350	
Energy / Fuel	\$	518,503	\$	788,221	\$	(269,718)	
Equipment Outlay	\$	1,284652	\$	230,077	\$	1,054,575	
Encumbrances Released	\$		\$	(7,295)	\$	(7,295)	
	\$	62,606,348	\$	55,690,626	\$	9,225,881	
Contingency					\$	1,132,000	
Inflation					\$	534,735	
Electrical Consumption Credit		•			\$	228,370	
Revenue Credit					\$	308,518	
Total Savings					\$	9,755,317	

### Personnel Expense

This expense category includes salaries, special pay, overtime and benefits. It once again represents the largest savings category due to the vacancy rate experienced throughout FY2008. The Bid assumes a 3% vacancy rate; the actual vacancy rate was 12%.

#### Supplies

This expense category includes everything from office and safety supplies to lab supplies and everything required to maintain the water system. In this category costs were below the Bid by \$45,691.

#### Chemicals

Chemical usage was optimized to reduce expenditures as well as a 3% drop in demand resulted in a \$394,728 savings. Chemical purchases continue to be fraught with market volatility and pricing increases based on worldwide demand of the commodity.

### Treated Water

The water treatment plants are able to treat water at a lower cost than treated water purchased from the CWA. One of the purposes of the Optimization Program is to minimize the purchase of imported treated water. The effectiveness of this Program has led to one of the biggest source of savings in the BTG program. For FY2008 the savings from the Bid for Treated Water is \$1.77M, which is in line with the realized FY2007 savings in this category.

#### Contractual Services

Actual expenditure in this category for FY2008 is \$270,346 above the FY2008 bid amount, and \$1.3M over the FY2007 contractual services expense, reversing the substantial savings trend of prior years. A number of issues led to this increase including but not limited to an increase in the costs of some contractual services; i.e. Atlas Portable Services for pumping out of portable outhouses at the Lakes increased \$42,000 from FY2007. Part of the increase is explained by an ISO consultant that was brought on board to facilitate the review and update of the program at a cost of \$133,600, that was posted as an FY2008 (exp & enc) Purchase Order. Additionally, in late March of 2007 we began a robust program of compaction testing of our trench work. This resulted in a \$95,270 increase in charges from Field Engineering from the partial FY2007 to an entire year of compaction testing experience in FY2008. At the Otay Plant construction of a chemical containment sump at a contracted cost of \$78,225 was a one-time expense that increased the level of safety of the chemical containment areas and a one-time "acid wash service" to the chlorine scrubber system in the amount of \$23,100 at Otay. In FY2008, using two contracts, the Dulzura Conduit was relined at a cost of \$563,075 and the Construction Program started using contracted street sweeping on an emergency basis.

### Fleet Costs

In prior years work was done to optimize the size of the motive equipment fleet and especially to reduce the use of pool vehicles and outside rental equipment. In FY2008 audited expenses are \$153,595 above the bid. \$84,000 of this is identified as pool

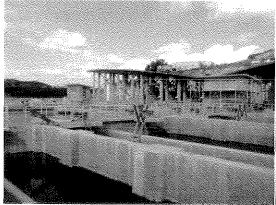
charges from Construction caused by the delay of the replacement of a loader. This loader has since been replaced.

## PAY FOR PERFORMANCE RESULTS

Water Operations Division instituted a total of 26 goals for the FY2008 Pay for Performance Program with the intention of goals being challenging and meaningful, yet achievable with increased efficiencies. Of the 26 goals, 24 goals were met or partially met. Two of these 26 goals were shared goals (calculated based upon goal achievement of other function areas that were supported). Goals were broken down by eight functional areas. Of the eight areas only two, Production Engineering and Safety, met 100% of their goals.

### Miramar Treatment Plant Upgrades

Another phase of the Miramar Water Treatment Plant upgrade and expansion was completed in FY2008. Included in this phase were new filter basins, chlorine facilities, chemical storage facilities, ozone building and a new administration building. The total project will be completed in late 2010 at a cost of \$195.9 million. When the project is complete, the treatment plant capacity will increase from 140 to 215 million gallons of water per day. The project also upgraded the instrumentation and control facility at Miramar Treatment Plant enabling the operators to operate the plant in automatic mode enhancing the production efficiency and Plant performance, allowing the Water Department to meet or exceed stricter federal and state drinking water standards.





Floculation Basins

Sedimentation Basins

#### Division Receives an Environmental Services Award

In FY2008 the Division received an Environmental Service Award for its' recycling program that dramatically reduced the amount of materials being sent to the Miramar Landfill. The Division's greatest wastes are materials removed from street excavated projects. Staff has identified recycled bins to separate the various materials which are all located in a central location. Past practices included hauling mixed loads of street

aggregates, along with materials such as wood, cardboard, plastic and paper. By separating these materials, large amounts of materials are diverted to the Vulcan Materials Company Recycling Center, instead of being hauled to the Miramar Landfill. The cost savings for recycling materials for FY2008 was \$213,650.00. The Division also recycles brass, copper, and cast-iron materials. The Division also continues to train staff to ensure the importance of recycling and reusing materials whenever possible.

## Environmental Management System is Improved

The Environmental Management System (EMS) was recertified on May 5, 2008 following an extensive renewal audit, conducted by ABS Quality Evaluations. A new ISO 14001:2004 Certificate of Conformance was issued and is valid until May 4, 2011.



During FY2008 a thorough review and update of the EMS was initiated to make it more relevant and impactful and to align it more closely with the Bid-to-Goal Program. Eighteen separate programs were identified were environmental protection could be enhanced and the results were tracked throughout the year. The results were as follows:

- 1. 13,345 lbs of paper was recycled (up from 7,280 lbs in FY2007)
- 2. 97.4% water service leaks were repaired within 7 days
- 3. 90.7% valve leaks were repaired within 5 days
- 4. Five dam assessments were completed
- 5. 33 raw water valve were assessed
- 6. 106 water main breaks were evaluated as to causation
- 7. Thirteen (of 148) boat engines were replaced with new 3-Star four-cycle fuel efficient engines
- 8. 87.5% of backcountry roads, culverts and drains were maintenance to prevent
- Funding was secured for replacement of old T-12 light fixtures and replaced with new energy efficient light bulbs.
- 10. Training exercises were completed at the water treatment plants to address emergency situations
- 11. Weekly jar tests were completed at the water treatment plants resulting in optimized chemical use
- 12. 367 control valves received preventive maintenance
- 13. 1,561 water treatment plant instruments received preventive maintenance
- 14. Eight potable water reservoirs received preventive maintenance
- 15. A program was started to replace all disposable batteries with rechargeable batteries

- 16. 5,465 lbs of aluminum, paper and plastic and 1,227 lbs of aluminum cans were recycled from City lakes
- 17. About 16,364 tons of construction debris was diverted from the landfill and recycled
- During the first six months of the year 7 tons of brass, 3 tons of copper and 104 tons of steel were recycled from the Chollas Operations Yard

## Otay Water Treatment Plant Reduces Purchased Water

When the current five-year Bid was developed a decision was made to make raw water costs an out-of-scope expense, but leave the costs of purchasing treated water in-scope because this is an expense that can be controlled through effective operation of the distribution system.

During FY2008 the Otay Water Treatment Plant Manager devised a way to reduce treated water purchased for plant operation. In the past, Otay Water Treatment Plant used its own treated water for chlorine process and other usage at the Operations building, County Park and the Boat Docking facility. The California Department of Public Health was not in agreement with this arrangement due to the lack of Contact Time for the water used for consumption at these facilities as a first customer. In 2005, the Otay Plant started to purchase treated water from the Otay Water District for chlorine process water and other uses. This was a costly alternative and the Plant Manager came up with an idea to use the water treated at the Plant for chlorine process water only and continue to purchase the needed potable water from Otay Water District. The improvement project involved installing 150 feet of pipeline and instrumentation to run water treated by the Otay Plant to the chlorine building. This project was completed in FY2008 by Water staff at a total cost of less than \$80,000. It eliminated the purchase of almost 200 AF per year from the Otay MWD at a net savings of \$51,000 in the first year. It also improved plant reliability by providing two water sources and two pumps for a mission-critical function.

## Otay Water Treatment Plant Surpasses Federal Standards

In May the Otay Water Treatment Plant received the "Directors Award of Recognition" from the Partnership for Safe Water for providing drinking water quality that surpasses the required federal standards. Less than one percent of the nation's utilities receive this honor. This makes the Otay Plant one of the highest performing water treatment facilities in the country. This is the result of the continual improvement mantra that the Bid go Goal Program supports.

Annual Drinking Water Report – The 2007 annual Drinking Water Quality Report was mailed to all households in the City. The new report layout is shorter, more concise and easier to comprehend than in previous years. This updated version is in line with our ISO Environmental Management System Program as it saves paper and other resources. This revised layout was recognized by the Mayor in a note to our Public Information Officer.

Meter Lid Installations / Meter Box Contract – In the third quarter of FY2008, Construction Program Management made significant strides in attempting to right size the crews on a daily basis to meet immediate needs within the various districts. This effort resulted in reducing the backlog of meter lid work orders. Our Supervisors analyzed staffing levels and allocation of staffing to better meet divisional goals. The meter lid backlog was brought down from 2,636 to 430 due to increased efficiency in the Construction Unit. The FY2008 Meter Box Replacement Program contracted out 1,280 new box installations, thus reducing the work order backlog for meter boxes.

October 2007 Wildfires – Beginning on October 21, 2007, wildfires County wide burned and destroyed numerous facilities at the Hodges Reservoir, Barrett Reservoir, Sutherland Reservoir, and the Dulzura Conduit. This disaster necessitated working though FEMA for reimbursement of costs to cleanup contamination, build, repair, remediate and restore the destroyed properties to pre-disaster condition, function and capacity. Lakes management worked diligently on these efforts and should be commended for their efforts in this regard.

FEMA Reimbursement Request for Barrett Road Repair — A succession of rain storms in December 2007, January and February 2008 inundated the San Diego County area after the wildfires, and caused major erosion and washouts of Barrett Lake Road, the major access road that runs alongside the primary stretch of the flume for the Dulzura Conduit. Barrett Lake Road is the only roadway that provides access to this critical section of the Dulzura Conduit that runs along the mountainside. Repairs to the conduit are still ongoing and were delayed due to six specific locations that were identified as major roadway washouts in immediate need of repair. In FY2008 City Engineers working closely with Reservoir staff began the laborious process of Barrett Road Repair. This work continues well into FY2009. Lake staff was instrumental in FEMA reimbursement requests dated 5/30/08 estimated at a cost of \$759,640.

<u>Lakes Program</u> – In July of 2007 the Lakes Program purchased a Remote Operations Vehicle (ROV) with \$42,000 of Bid to Goal Savings. This piece of equipment allowed one of our Ranger Divers to respond to a request for assistance from the Mexican government following a diving tragedy in the Bay of Puerto Vallarta. With the approval of the Mayor, our employee flew to Guadalajara and then drove to Puerto Vallarta, where he assisted in the search of the bodies of two members of the Civil Protection Team that responds to disasters in the State of Jalisco and a journalist who was covering their training dive. This action represents the professionalism and skill of our Lakes Program Ranger/Divers.

Later, in the summer of 2007, the ROV went into service when our Ranger Divers supported San Diego Life Guard Services with a recovery of a lost diver from the extreme depth in the La Jolla Trench. And then again, when the U.S. Coast Guard requested assistance in evaluation of a potential floating bomb seven miles of the Point Loma shore.

## **CONCLUSION**

Water Operations Division continues to realize benefits from the Bid to Goal Program. The workforce remains engaged in an entrepreneurial effort to continue to grow savings. This was primarily evidenced in FY2008 by work on processes for improved quality and greater efficiencies. This work will serve the City and the ratepayers well for many years to come.

Attachments

- 1 Table 1.2 FY2008 Expense Summary 2 FY2008 Performance Results

Table 1.2 - FY 2008 Summary Budget Objective, Water Operations Division (\$)

		In Scope	% of Bid	Per Audit FY2008	Per Audit FY2007	
Functional Group or Remark	BID FY 2008	Expenses	Expended	Savings	Savings	Change
Water Treatment Plants	9,959,409	8,666,308	87.0%	1,293,101	714,616	578,485
System Operations	5,407,526	6,327,879		. ,		(1,207,492)
Construction	20,347,518	19,515,809		, , ,	790,790	40,919
Administrative Support	6,506,525	5,430,069			1,910,982	(834,526)
Water Quality Laboratory	5,039,328	4,004,462			905,508	129,358
Engineering	3,182,262	2,681,305			1,520,376	(1,019,419)
Treated Water	4,799,606	3,023,495			1,430,942	345,169
Reservoirs & Recreation	6,077,466	5,048,292			808,887	220,287
Safety	1,286,737	993,007			280,316	13,414
Environmental Management	.,200,.0.	-	77.270	200,700	150,914	
Divisional Contingency	890,700	_		90,619		(150,914)
Inflation - Adjusted	2,312,271	_	-		- 	90,619
Electrical Consumption Credit	2,012,211	-	-	2,312,271	534,735	1,777,536
Revenue Credit				128,187 445,649	228,370 308,518	(100,183) 137,131
				440,049	300,318	137,131
Fixed Budget Objective	\$ 65,809,348	\$ 55,690,626	84.6%	, -,,	\$ 9,872,093	\$ 20,384
Correction to FY2007				\$ (98,120)		
Net FY2008 Savings				\$ 9,794,357	<b>=</b>	
	BID	Actual				
MWWD / CIP Support (1)	6,066,218	666,195	- 11.0%	5,400,023		
Other Pass Through Costs (2)	19,537,516	10,323,223		, ,		
Raw Water Purchases	128,775,073	114,324,728				
Budgeted Pay for Performance	120,770,073			, ,		
Gainsharing Bonuses (504-1121)	=	640,127		(640, 127)		
	**	1,999,079		(1,999,079)		
BTG Outside Audit (5041-1122&2306)	-	46,080	)	(46,080)		
Pass Through Budget Objective	\$ 154,378,807	\$ 127,999,431	82.9%	\$ 26,379,376		
Out of Scope Deductions	\$ -	\$ 23,750,606				
Post-Closing Encs Released		\$ 597,707				
Total Bid Budget Objective	\$ 220,188,155	\$ 208,038,370	94.5%			
Pass Through Itemization	BID	Actual				
(1) MWWD / CIP Support		Actual	•			
CIP Support (Construction)	5,329,655	265,897		5,063,758		
Lab Support (Labor only)	92,642	95,717		(3,075)		
FIMS Support (Engineering)	643,921	220,571		, , ,		
FIMS Support (Construction)	043,321	84,010		423,350		
· mio cupport (construction)	6,066,218	666,195	-	5,484,033		
(2) Other Pass Through Costs	0,000,210	000,100		3,404,033		
Lakes Concessions (599-4272)	2,010,132	183	•	2 000 040		
Security Contract (ORG 5141)	1,687,296	1,188,492		2,009,949 498,804		
Utilities (portion)	10,668,146			,		
Insurance & Claims		6,426,532		4,241,614		
Contractual Services	3,034,726	1,804,555		1,230,171		
Inspection Fees	-	79,929		(00.040)		
Right-of-Way Fee	1 205 152	92,319		(92,319)		
SLAs	1,325,163	**	No longer assessed	1,325,163		
	337,459	470 E00		337,459		
Rent (504-4682)	440,848	473,500		(32,652)		
Other - San Dieguito Irr Dist (504-4229) Other - Imperial Irr District (504-4469)	- 33,746	257,713		(222.00%)		
Outer - subcital in District (304-4408)	19,537,516	10,323,223		(223,967)		
	19,007,010	10,323,223		9,518,189		

# PERFORMANCE GOALS ANNUAL REPORT - FY 2008

Attachment 2

PAY FOR PERFORMANCE AND OTHER GOALS	<u>Goal</u>	Audited <u>Results</u>	Achieved PFP Goal?
Administration Support  1 Submit All BTG Financial Reports On Time 2 Publish Seven Newsletters	100% 100%	25% 100%	25% Yes
Construction			
<ul> <li>Investigate Distribution Service Leaks Within Two Working Days</li> <li>Repair Distribution Service Leaks Within Seven Working Days</li> </ul>	87.0% 94.0%	83.5% 97.4%	50% Yes
3 Repair Cityside Valve Leaks Within Five Working Days	93.0%	90.7%	75%
4 Perform 16,144 PMs to Air Valves, Hydrants, Blowoffs, and Valves GT6" Other Respond to Water Main Breaks Within One Hour Other Respond to Fire Hydrant Knock-Overs Within One Hour Other Respond to Meter Leaks Within 2 Working Days	70.0%	104.2% 62.7% 94.5% 85.1%	Yes
Production Engineering			
1 Complete 5 Dam Operations Manuals	100%	100%	Yes
Complete 26 Bi-Weekly Water Purchase Update Reports     Complete an O&M Report for 33 Valves	100%	100%	Yes
3 Complete an O&M Report for 33 Valves	100%	100%	Yes
Facility Information Management (FIMS)			
1 Map Drawings Into GIS Within Sixty Calendar Days	95%	77.3%	No
2 Respond to Customer Phone Inquiries by COB of the Next Workday	95%	99.6%	Yes
System Operations / Optimization			
1 Perform 477 PM Services on Control Valves & Regulator Valves	95%	90%	No
Inspect and Prepare Reports for 15 Pump Stations and 3 Pressure Zones; and Report on Every Main Break Within 2 Weeks	100%/90%	100%/93.5%	75%
a. Perform Monthly PMs on 24 Generators & Annual PMs on 201 Pump Motors	95%	95.1%	Yes
b. Create a Thermal and Visual Imaging DB of Pump Station Motors and Starters	90%	0%	No
4 Perform 1,516 PMs on Instruments at 3 Plant and 264 SCADA Sites Other Repair Hydrant Knock-Overs Within 3 Days (104 Knockovers)	95%/90%	0% 82.7%	No
December and December			
Reservoirs and Recreation 1 Complete Scheduled Routine Maintenance	07.50/	020/	V.
Complete Routine Property and Watershed Inspections	87.5% 95%	93% 94%	Yes 75%
3 Complete Scheduled Readings and Measurements	95%	93.7%	75%
Other Open Recreation Facilities on 90% of Scheduled Days Offered		117%	Yes
Cafatu			
Safety 1 Conduct 120 Construction Site Safety Field Audits	120	120	Yes
2 Conduct 16 Facility and 4 Vehicle Safety Inspection Sessions	20	23	Yes
3 Conduct 150 Security Audit & Procedure Checks	150	177	Yes
Treatment Plants/Laboratory			
Maintain Costs of Six Tests At or Below Costs at Private Labs	100%	75%	75%
2 Implement Weekly Jar Testing (78 Tests) by Plant Operators	100%	0%	75% No
3 Conduct Plant Emergency Response Training and Two Drills	100%	100%	Yes
and the pine	10070	100 /0	188

BEST	N CLASS GOALS	(FY2007) <u>Goal**</u>	<u>Actual</u>	Achieved Goal?
1	Meet or Exceed 100% of the Health-Related Drinking Water Standards in U.S National Primary Drinking Water Regulations	100%	100%	Yes
2	Achieve Best in Class Status in Water Distribution System Integrity in Terms of Number of Leaks and Breaks per 100 Miles of Pipe	≤ 15.2	8.48	Yes
3	Achieve Best in Class Status by Minimizing Water Loss	≤ 6.2%	9.25%	No Median Quartile
4	Achieve Best in Class Status in Terms of Training Hours per Employee	> 33.8	37.7	Yes
5	Achieve Best in Class Status in the Number of Technical Quality Complaints (352 Complaints)	≤ 2.2	1.3	No
6	Achieve Root in Clara Status in the Number of Customer Camina Countries	40.7	0.44	Median Quartile
Ū	Achieve Best in Class Status in the Number of Customer Service Complaints	≤0.7	0.14	Yes
7	Provide Cost Effective Water by Keeping O&M Costs At or Below \$211/MG	≤ \$211/MG	\$166.00	Yes
Other	Provide Excellent Customer Service (According to Surveys Returned)		79.0%	
Other	Respond to Customer Inquiries Within One Business Day		99.5%	

<sup>\*\*</sup> QualServ did not update their reports for FY2008 to allow time to conduct a thorough review of methodologies.

